NTTA

NORTH TEXAS TOLLWAY AUTHORITY
5900 W. Plano Pkwy., Plano, Texas 75093
Gerry Carrigan, Executive Director

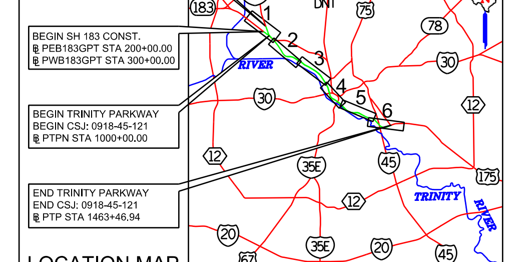
Texas Department of Transportation®
DALLAS DISTRICT
WILLIAM L. HALE, P.E., DISTRICT ENGINEER

DESIGN SCHEMATIC
PROPOSED TRINITY PARKWAY
FROM IH 35E / SH 183
TO US 175 / SH 310
DALLAS COUNTY, TEXAS
CSJ 0918-45-121

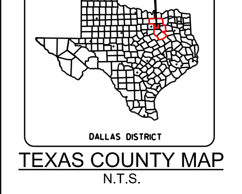
FEBRUARY 2014
ROLL 2 OF 11

PROPOSED TRINITY PARKWAY	
CSJ 0918-45-121	
FROM:	IH 35E / SH 183
TO:	US 175 / SH 310
PROJECT LENGTH:	8.79 MILES
FUNCTIONAL CLASSIFICATION:	URBAN FREEWAY
AVERAGE DAILY TRAFFIC:	54,000 (2020) 135,000 (2035)

DESIGN SPEEDS	
TRINITY PARKWAY:	60 MPH
IH 35E:	60 MPH
IH 45:	60 MPH
SH 183:	50 MPH
DIRECT CONNECTORS:	50 MPH
FRONTAGE ROADS:	40 MPH
RAMPS:	30 MPH
CROSS STREETS:	30 MPH
PARK ACCESS ROADS:	15 MPH



LOCATION MAP
N.T.S.



TEXAS COUNTY MAP
N.T.S.

PRELIMINARY
FOR INTERIM REVIEW ONLY
THESE DOCUMENTS ARE FOR INTERIM REVIEW AND NOT INTENDED FOR REGULATORY APPROVAL, PERMIT, BIDDING OR CONSTRUCTION PURPOSES. THEY WERE PREPARED BY OR UNDER THE SUPERVISION OF:

NAME	P.E. NO.	DATE
MATTHEW G. CRAIG	69910	02-07-2014
JEREMY W. MCGAHAN	103650	02-07-2014

HALFF ASSOCIATES, INC.
TBPE FIRM #F-312

HALFF
1201 NORTH BOWSER ROAD
RICHARDSON, TEXAS 75081-2275
TEL (214) 346-6200
FAX (214) 739-0095

VERTICAL SCALE: 1"=20' (0 10 20 30 40)
HORIZONTAL SCALE: 1"=200' (0 100 200 300 400)

DATE SUBMITTED: FEBRUARY 7, 2014
DATE APPROVED:

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LEGEND:

- EXISTING ROW
- EXISTING PROPERTY LIMITS
- EXISTING CONTOURS
- FUTURE LAMAR LEVEE (DRAFT, BY OTHERS)
- EXISTING BRIDGE TO REMAIN
- PROPOSED BRIDGE
- PROPOSED MAIN LANES
- PROPOSED RAMP / DC
- PROPOSED FRONTAGE ROAD
- PROPOSED CROSS STREET
- PROPOSED PARK ACCESS
- PROPOSED OPERATION AND MAINTENANCE ROAD
- PROPOSED SIDEWALK
- BRIDGE (BY OTHERS)
- PAVEMENT (BY OTHERS)
- POTENTIAL DISPLACEMENTS
- BRIDGE / PAVEMENT REMOVAL (BY OTHERS)
- PROPOSED BRIDGE / PAVEMENT REMOVAL
- PROPOSED BASELINE / CENTERLINE
- PROPOSED ROW
- PROPOSED EASEMENT
- PROPOSED CONTROL OF ACCESS
- PROPOSED ROW (BY OTHERS)
- PROPOSED EASEMENT (BY OTHERS)
- PROPOSED CONTROL OF ACCESS (BY OTHERS)
- PROPOSED EDGE OF PAVEMENT
- PROPOSED BRIDGE ABUTMENT
- PROPOSED BRIDGE BENT
- PROPOSED BRIDGE COLUMN
- PROPOSED CONCRETE TRAFFIC BARRIER
- PROPOSED RETAINING WALL
- PROPOSED SECURITY WALL
- PROPOSED FLOOD WALL
- PROPOSED DIAPHRAGM WALL
- PROPOSED TOLL GANTRY
- DIRECTION OF TRAVEL
- BVP LAKE LOCATIONS (PROJECT BY OTHERS)
- PROPOSED EXCAVATION AREAS
- EXISTING OPERATION AND MAINTENANCE ROAD
- EXISTING TELEPHONE
- EXISTING FIBER OPTIC / CABLE TV
- EXISTING WATER
- EXISTING UNDERGROUND ELECTRIC
- EXISTING OVERHEAD ELECTRIC
- EXISTING WASTE WATER
- EXISTING FORCE MAIN
- EXISTING STORM SEWER / CULVERT
- EXISTING GAS LINE
- PROPOSED SLURRY WALL (BY OTHERS)
- PROPOSED CULVERT
- 100 YR FLOODPLAIN LIMITS
- TRINITY RIVER (DIRECTION OF FLOW)

GENERAL NOTES:

1. EXISTING FEATURES WERE NOT FIELD SURVEYED. SCHEMATIC LAYOUTS ARE BASED ON AERIAL TOPOGRAPHY AND RECORD PLANS ONLY. THE AERIAL TOPOGRAPHY WAS PROVIDED BY THE USACE IN 1993. THE AERIAL IMAGES DISPLAYED ARE FOR VISUALIZATION PURPOSES ONLY. THIS IMAGERY WAS PROVIDED BY THE CITY OF DALLAS IN 2011.
2. PARCEL LIMITS AND OWNERSHIP INFORMATION WAS COLLECTED FROM THE DALLAS CENTRAL APPRAISAL DISTRICT (JANUARY 2013).
3. DIMENSIONS ARE TO EDGE OF PAVEMENT OR NOMINAL FACE OF RAIL / CURB / BARRIER (UNLESS NOTED OTHERWISE).
4. SUPERELEVATION TRANSITIONS ARE LINEAR WITH THE AXIS OF ROTATION LOCATED ON THE PGL.
5. CONVENTIONAL ROADWAY SIGNAGE (SMALL SIGNS) ARE NOT SHOWN AND WILL BE DEVELOPED DURING PS&E.
6. AVERAGE DAILY TRAFFIC VOLUME PROJECTIONS DEVELOPED BY CDM SMITH (FEBRUARY 2013).
7. CURBS ARE TYPE 2 (UNLESS NOTED OTHERWISE).
8. ACCESS ALONG THE PROPOSED FRONTAGE ROADS WILL BE CONTROLLED BY PERMIT ONLY IN ACCORDANCE WITH THE TXDOT ACCESS MANAGEMENT MANUAL.
9. PROJECTS SHOWN AS BY OTHERS ARE PRELIMINARY. ON-GOING COORDINATION BETWEEN PROJECTS IS REQUIRED TO VERIFY IMPROVEMENTS BETWEEN PROJECTS REMAIN COMPATIBLE.
10. GUIDE SIGNS TOLLING PLAQUES MAY REQUIRE REFINEMENT DURING DETAILED SIGN DEVELOPMENT DURING PS&E DESIGN.
11. THE 100 YR WATER SURFACE ELEVATIONS ARE APPROXIMATE. THEY ARE PROJECTED FROM THE USACE - CDC MODEL (AUGUST 2012).
12. THE FLOOD SEPARATION WALL SHOULD MAINTAIN A MINIMUM HEIGHT OF 2 FEET GREATER THAN THE 100 YEAR WATER SURFACE ELEVATION. THE PURPOSE OF THE FLOOD SEPARATION WALL IS TO PREVENT THE TRINITY PARKWAY FROM FLOODING DURING A 100 YR STORM EVENT. THE SPECIFIC WALL TYPE FOR THE FLOOD SEPARATION WALLS WILL BE DETERMINED WITH FUTURE GEOTECH INVESTIGATION DURING PS&E DESIGN.
13. THE TYPE OF WALL FOR THE SECURITY WALL WILL BE DETERMINED WITH FUTURE GEOTECH INVESTIGATION DURING PS&E DESIGN.
14. THE EXACT LOCATION OF THE PROPOSED SLURRY WALL IS TO BE DETERMINED WITH FUTURE GEOTECH INVESTIGATION DURING PS&E DESIGN. THE PROPOSED SLURRY WALL IS PROVIDED TO ACCOMODATE UNDERWATER SEEPAGE.
15. EXACAVATION AREAS ARE LOCATED ON AN AS-NEEDED BASIS TO ACCOMODATE ROADWAY EMBANKMENT NEEDS AND TO ACHIEVE HYDRAULIC NEUTRALITY FOR THE PROJECT. THESE LOCATIONS HAVE BEEN COORDINATED WITH THE CITY OF DALLAS FOR COMPATABILITY WITH FUTURE FLOODWAY PROJECTS.
16. THE EXACT LOCATION AND LIMITS OF DIAPHRAGM WALL WILL BE DETERMINED WITH FUTURE GEOTECH INVESTIGATION DURING PS&E DESIGN.
17. DRIVEWAY LOCATIONS ARE PRELIMINARY AND WILL BE FURTHER DEVELOPED DURING PS&E DESIGN. ALL DRIVEWAYS UTILIZE 15' CURB RADIUS (UNLESS NOTED OTHERWISE).
18. CROSS STREETS UTILIZE 50' RADIUS (UNLESS NOTED OTHERWISE).
19. ALL NEW OPERATION AND MAINTENANCE ROADS WITHIN THE FLOODWAY SHALL BE 8" CONCRETE PAVEMENT.
20. THE 5' PLANTAR BOX BETWEEN THE SB TRINITY PARKWAY MAIN LANES AND THE FLOOD SEPARATION WALL SHALL ACCOMODATE COLUMNS FOR FUTURE DECK PROJECTS OVER THE MAIN LANES.
21. THE PROPOSED ROW AND EASEMENTS ARE CONSISTENT WITH THOSE EVALUATED IN THE FINAL ENVIRONMENTAL IMPACT STATEMENT.

CURVE DATA

CURVE ID	DESIGN SPEED	CURVE	P.I. STATION	P.I. STATION - N	P.I. STATION - E	DELTA	RADIUS	TANGENT	LENGTH	CHORD LENGTH	P.C. STATION	P.T. STATION	BACK TANGENT	AHEAD TANGENT
200	40	PCOMW-1	25+53.55	N 6,982,873.1668	E 2,471,805.5605	6° 52' 07.07" (LT)	1,045.00	62.71	125.27	125.20	24+90.84	26+16.12	N 47° 21' 47.22" E	N 40° 29' 40.15" E
201	40	PCOMW-2	26+78.83	N 6,982,968.5486	E 2,471,887.0084	6° 52' 07.07" (RT)	1,045.00	62.71	125.27	125.20	26+16.12	27+41.39	N 40° 29' 40.15" E	N 47° 21' 47.22" E
202	40	PCOMW-3	27+88.90	N 6,983,043.2092	E 2,471,968.0964	5° 12' 23.22" (LT)	1,045.00	47.51	94.96	94.93	27+41.39	28+36.35	N 47° 21' 47.22" E	N 42° 09' 24.00" E
203	40	PCOMW-4	28+80.88	N 6,983,111.4437	E 2,472,029.8737	4° 52' 49.61" (RT)	1,045.00	44.53	89.01	88.99	28+36.35	29+25.36	N 42° 09' 24.00" E	N 47° 02' 13.61" E
204	60	PNBTP-1	1047+68.65	N 6,979,580.3600	E 2,473,373.3530	44° 44' 33.17" (LT)	2,853.79	1,174.57	2,228.54	2,172.34	1035+94.07	1058+22.61	S 30° 22' 57.13" E	S 75° 07' 30.30" E
205	60	PNBTP-2	1081+02.04	N 6,978,693.6836	E 2,476,711.6086	15° 26' 26.80" (RT)	2,875.79	389.86	775.00	772.66	1077+12.18	1084+87.18	S 75° 07' 30.30" E	S 59° 41' 03.50" E
206	60	PNBTP-3	1096+50.24	N 6,977,909.8262	E 2,478,052.1766	5° 02' 46.47" (RT)	11,480.16	505.88	1,011.10	1,010.77	1091+44.36	1101+55.46	S 59° 41' 03.50" E	S 54° 38' 17.03" E
207	60	PNBTP-4	1111+65.70	N 6,977,032.3871	E 2,479,288.5921	10° 05' 41.28" (LT)	11,438.16	1,010.24	2,015.26	2,012.65	1101+55.46	1121+70.72	S 54° 38' 17.03" E	S 64° 43' 58.31" E
208	20	PPAHAM-1	13+08.76	N 6,977,240.2478	E 2,473,084.1634	123° 25' 54.14" (RT)	150.00	278.77	323.14	264.18	10+30.00	13+53.14	N 0° 46' 45.98" W	S 57° 20' 51.85" E
209	20	PPAHAM-2	14+96.57	N 6,977,012.4617	E 2,473,439.6279	30° 12' 11.03" (LT)	300.00	80.95	158.14	156.32	14+15.61	15+73.75	S 57° 20' 51.85" E	S 87° 33' 02.88" E
210	40	PRNEHAM-1	11+71.30	N 6,979,652.1454	E 2,473,753.1034	12° 49' 05.76" (LT)	1,525.00	171.30	341.17	340.46	10+00.00	13+41.17	S 54° 32' 36.88" E	S 67° 21' 42.64" E
211	40	PRNEHAM-2	18+08.04	N 6,979,406.5080	E 2,474,342.1035	7° 24' 47.68" (LT)	4,010.00	259.78	518.84	518.47	15+48.26	20+67.10	S 67° 21' 42.64" E	S 74° 46' 30.32" E
212	40	PRNXCOM-1	13+24.00	N 6,982,460.2853	E 2,471,824.5734	4° 00' 00.00" (RT)	5,500.00	192.06	383.97	383.89	11+31.94	15+15.91	S 30° 22' 57.13" E	S 26° 22' 57.13" E
213	40	PRNXCOM-2	23+63.18	N 6,981,529.2044	E 2,472,286.4124	4° 00' 00.00" (LT)	4,010.00	140.03	279.95	279.89	22+23.14	25+03.09	S 26° 22' 57.13" E	S 30° 22' 57.13" E
214	40	PRNXHAM-1	10+12.50	N 6,979,346.7342	E 2,474,607.4189	0° 21' 30.00" (LT)	3,998.00	12.50	25.00	25.00	10+00.00	10+25.00	S 74° 46' 00.30" E	S 75° 07' 30.30" E
215	40	PRNXHAM-2	16+19.55	N 6,979,190.8990	E 2,475,194.1242	4° 00' 00.00" (RT)	5,230.00	182.64	365.12	365.05	14+36.91	18+02.04	S 75° 07' 30.30" E	S 71° 07' 30.30" E
216	40	PRNXHAM-3	22+35.83	N 6,978,991.4818	E 2,475,777.4072	4° 00' 00.00" (LT)	4,010.00	140.03	279.95	279.89	20+95.80	23+75.75	S 71° 07' 30.30" E	S 75° 07' 30.30" E
217	40	PRSECOM-1	17+23.37	N 6,981,941.4364	E 2,471,837.2303	4° 31' 14.61" (LT)	5,230.00	206.43	412.66	412.55	15+16.94	19+29.59	S 30° 22' 57.13" E	S 34° 54' 11.74" E
218	40	PRSECOM-2	20+78.40	N 6,981,650.0963	E 2,472,040.4966	4° 31' 14.61" (RT)	3,770.00	148.81	297.46	297.38	19+29.59	22+27.05	S 34° 54' 11.74" E	S 30° 22' 57.13" E
219	40	PRSEHAM-1	15+77.72	N 6,978,972.9336	E 2,475,103.2083	4° 00' 00.00" (LT)	4,010.00	140.03	279.95	279.89	14+37.69	17+17.64	S 75° 07' 30.30" E	S 79° 07' 30.30" E
220	40	PRSEHAM-2	21+94.03	N 6,978,856.6345	E 2,475,708.5683	4° 00' 00.00" (RT)	4,010.00	140.03	279.95	279.89	20+54.00	23+33.95	S 79° 07' 30.30" E	S 75° 07' 30.30" E
221	40	PRSXHAM-1	16+58.29	N 6,979,229.8754	E 2,474,089.1006	20° 43' 21.52" (LT)	1,540.00	281.57	556.98	553.95	13+76.72	19+33.71	S 54° 24' 08.78" E	S 75° 07' 30.30" E
222	60	PSBTP-1	1048+20.32	N 6,979,524.6562	E 2,473,380.5091	44° 44' 33.17" (LT)	2,875.79	1,183.63	2,245.72	2,189.09	1036+36.69	1058+82.41	S 30° 22' 57.13" E	S 75° 07' 30.30" E
223	60	PSBTP-2	1081+62.08	N 6,978,635.5939	E 2,476,727.7475	15° 26' 26.80" (RT)	2,853.79	386.88	769.07	766.75	1077+75.20	1085+44.27	S 75° 07' 30.30" E	S 59° 41' 03.50" E
224	60	PSBTP-3	1096+65.20	N 6,977,874.5036	E 2,478,029.3789	5° 02' 46.48" (RT)	11,438.16	504.03	1,007.40	1,007.07	1091+61.18	1101+68.58	S 59° 41' 03.50" E	S 54° 38' 17.03" E
225	60	PSBTP-4	1111+82.07	N 6,976,996.2591	E 2,479,266.9293	10° 05' 24.63" (LT)	11,480.16	1,013.49	2,021.73	2,019.12	1101+68.58	1121+90.31	S 54° 38' 17.03" E	S 64° 43' 41.66" E
226	60	PTPN-1	1007+02.80	N 6,983,085.5124	E 2,471,305.5769	15° 24' 49.23" (RT)	2,300.00	311.25	618.74	616.88	1003+91.55	1010+10.30	S 45° 47' 46.36" E	S 30° 22' 57.13" E

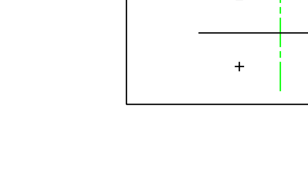
PARCEL DATA

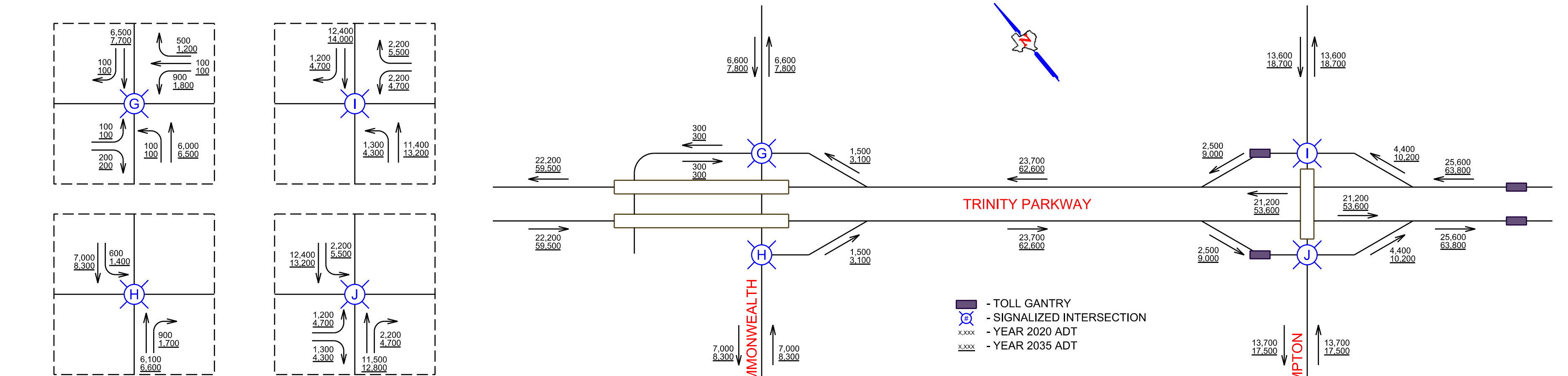
PARCEL ID	OWNER	PROPERTY ADDRESS	OCCUPANT
19	DALLAS CITY OF	3111 N STEMMONS FWY	COMMERCIAL
20	CJM2 PPTIES LLC	3150 IRON RIDGE ST	COMMERCIAL
21	A&W COMMONWEALTH LLC	3120 COMMONWEALTH DR	COMMERCIAL
22	TIEBOUT ASSOCIATES INC	3131 COMMONWEALTH DR	COMMERCIAL
23	H & M RLTY CO PS	3122 COMMONWEALTH DR	COMMERCIAL
24	H & M RLTY CO PS	3124 COMMONWEALTH DR	COMMERCIAL
25	H & M RLTY CO PS	3126 COMMONWEALTH DR	COMMERCIAL
26	KASMIR FABRICS, LLC	3191 COMMONWEALTH DR	COMMERCIAL
27	BRIGHT MERVIN THOMAS &	3151 COMMONWEALTH DR	COMMERCIAL
28	MOBIL OIL CORP	3000 PEGASUS PARK DR	COMMERCIAL
29	POWELL ELMER C	3130 COMMONWEALTH DR	COMMERCIAL
30	WASHINGTON WHOLESALE	5031 LAKAWANA ST	COMMERCIAL
31	COMMONWEALTH INDUSTRIAL LLC	3131 IRVING BLVD	COMMERCIAL
32	KKL INVESTMENT PARTNERS	3054 IRVING BLVD	COMMERCIAL
33	BOWEN & ASSOCIATES LLC	3040 IRVING BLVD	COMMERCIAL
34	DALLAS CITY OF	3040 IRVING BLVD	COMMERCIAL
35	HIGHLAND PARK TOWN OF	2500 CONVEYOR LN	COMMERCIAL
36	DALLAS CITY OF	200 INWOOD RD	COMMERCIAL
37	DALLAS CITY OF	200 W MOCKINGBIRD LN	COMMERCIAL
38	DALLAS CITY OF	1001 TRINITY RIVER DR	COMMERCIAL
39	DALLAS CITY OF	4500 N HAMPTON RD	COMMERCIAL
40	DALLAS CITY OF	1001 TRINITY RIVER DR	COMMERCIAL
41	DALLAS CITY OF	1001 TRINITY RIVER DR	COMMERCIAL
42	DALLAS CITY OF	1001 TRINITY RIVER DR	COMMERCIAL
46	DALLAS CITY OF	1000 TRINITY TOLLWAY	COMMERCIAL

SUPERELEVATION DATA

CHAIN	BEGIN TRANSITION STA	BEGIN TRANSITION e	END TRANSITION STA	END TRANSITION e
NB PTPN	1006+80.30	-5.04%	1016+70.30	2.50%
PNBTP	1034+57.45	2.50%	1036+67.45	4.45%
PNBTP	1057+66.99	4.45%	1059+43.99	2.50%
PNBTP	1072+21.56	2.50%	1079+62.56	-4.42%
PNBTP	1082+43.56	-4.42%	1089+84.56	2.50%
SB PTPN	1008+53.30	-5.04%	1013+24.30	-2.50%
PSBTP	1030+20.69	-2.50%	1039+44.69	4.42%
PSBTP	1056+35.41	4.42%	1063+76.41	-2.50%
PSBTP	1076+35.20	-2.50%	1078+45.20	-4.45%
PSBTP	1084+74.27	-4.45%	1086+84.27	-2.50%
PRNEHAM	13+92.00	4.45%	15+12.00	2.00%
PRNEHAM	18+90.00	2.00%	20+10.00	1.07%
PRNXCOM	10+62.00	1.30%	11+82.00	2.00%
PRNXCOM	16+72.00	2.00%	17+22.00	2.50%
PRNXHAM	10+57.00	1.07%	11+77.00	2.00%
PRNXHAM	18+00.00	2.00%	18+50.00	2.50%
PRSECOM	10+62.00	-0.13%	11+82.00	-2.00%
PRSECOM	16+17.00	-2.00%	16+67.00	-2.50%
PRSEHAM	10+57.00	1.07%	11+77.00	-2.00%
PRSEHAM	17+91.00	-2.00%	18+41.00	-2.50%
PRSXHAM	18+59.80	4.42%	19+79.80	1.07%

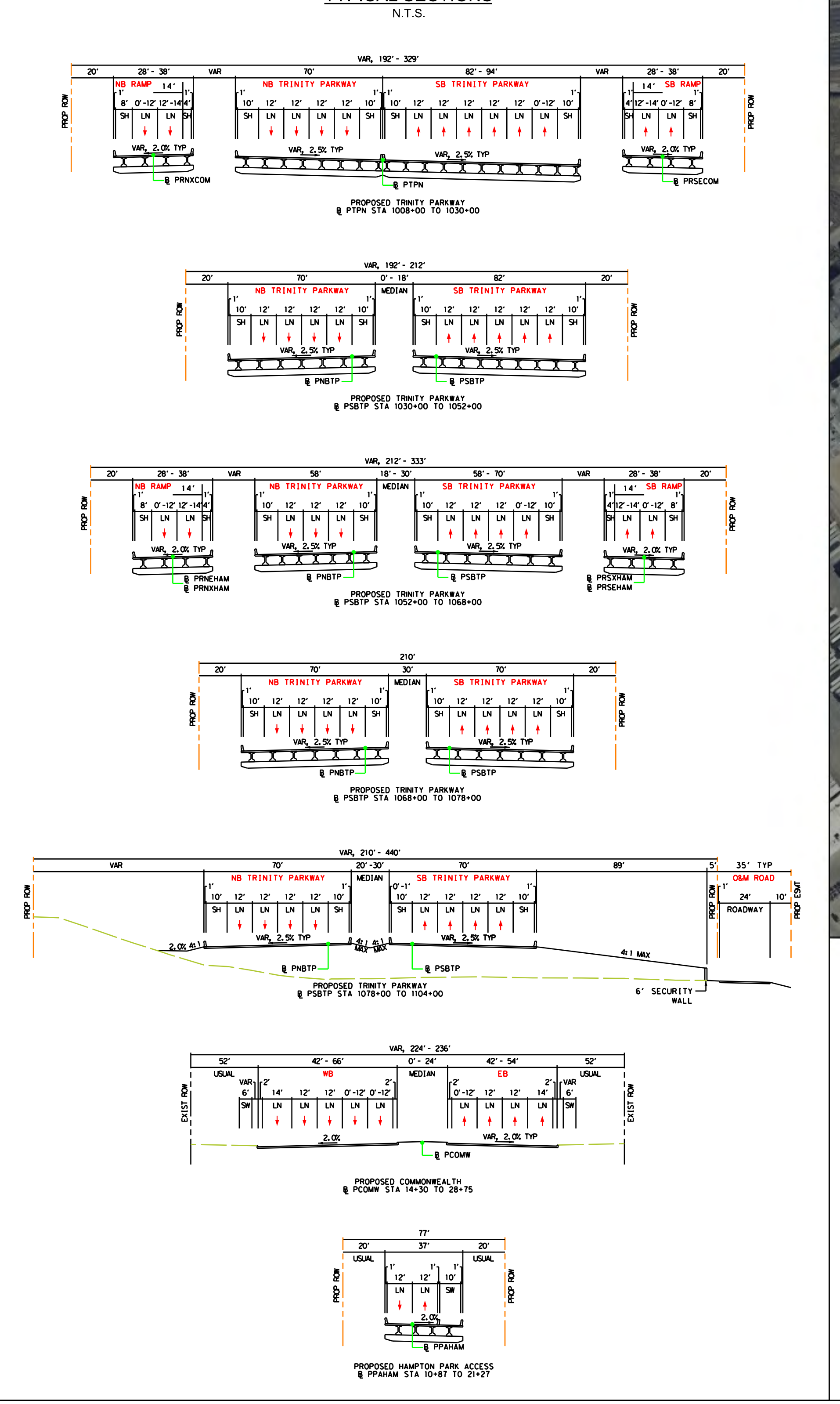
SUPERELEVATION COORDINATE SYSTEM

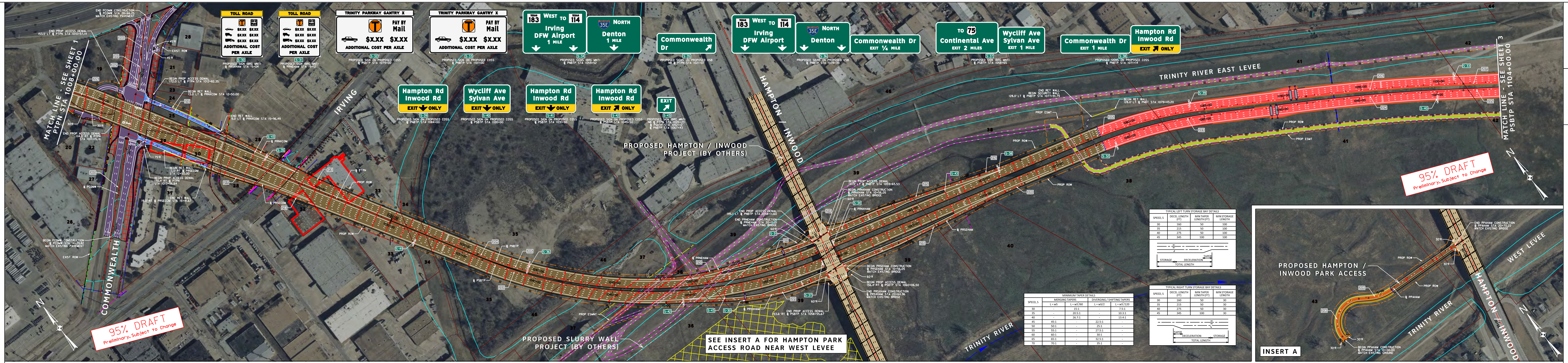




TRAFFIC VOLUME PROJECTION DIAGRAM
N.T.S.

TYPICAL SECTIONS
N.T.S.





TYPICAL LEFT TURN STORAGE BAY DETAILS

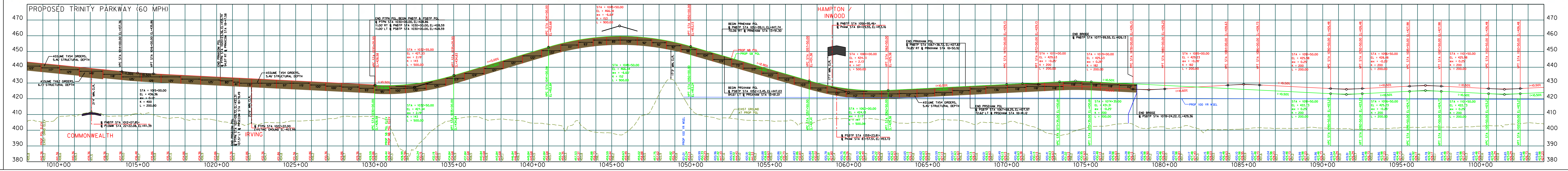
SPEED, S	DECEL LENGTH (FT)	MIN TAPER LENGTH (FT)	MIN STORAGE LENGTH
30	160	50	100
35	215	50	100
40	275	50	100
45	345	100	100

TYPICAL RIGHT TURN STORAGE BAY DETAILS

SPEED, S	DECEL LENGTH (FT)	MIN TAPER LENGTH (FT)	MIN STORAGE LENGTH
30	160	50	30
35	215	50	30
40	275	50	30
45	345	100	30

MINIMUM TAPER DETAILS

SPEED, S	MERGING TAPERS L = wS	MERGING TAPERS L = wS²/60	DIVERGING / SHIFTING TAPERS L = wS/2	DIVERGING / SHIFTING TAPERS L = wS²/120
30	-	15:1	-	7.5:1
35	-	20.5:1	-	10.3:1
40	-	26.7:1	-	13.4:1
45	45:1	-	22.5:1	-
50	50:1	-	25:1	-
55	55:1	-	27.5:1	-
60	60:1	-	30:1	-
65	65:1	-	32.5:1	-
70	70:1	-	35:1	-



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Gerry Carrigan, Executive Director
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DESIGN SCHEMATIC
PROPOSED TRINITY PARKWAY
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TO US 175 / SH 310
DALLAS COUNTY, TEXAS
CSJ 0918-45-121
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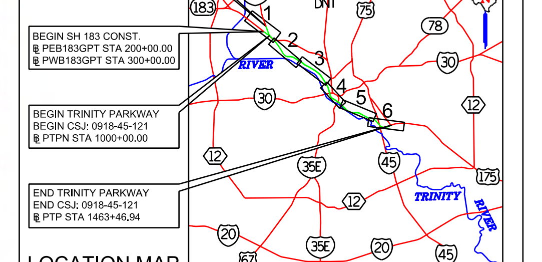
ROLL 2 OF 11



LOCATION MAP
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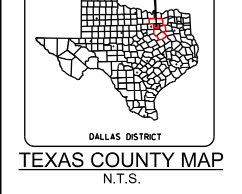

TEXAS COUNTY MAP
N.T.S.
PRELIMINARY
FOR INTERIM REVIEW ONLY
HALFF
VERTICAL SCALE: 1"=20'
HORIZONTAL SCALE: 1"=200'
DATE SUBMITTED: FEBRUARY 7, 2014
DATE APPROVED:
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